

Gas Balancing Regime

1998 Consultation

Short Term Proposals

AGAS

Alliance Gas

Enron

Dynegy UK

Shell Gas Direct

Introduction

In May 1998, Ofgas published a consultation document proposing the establishment of an on-the-day commodity market as part of the ongoing development of the gas balancing regime¹. Prior to the release of the document, a number of shippers had expressed common concerns over areas of the Network Code which were felt to be contributing to an excessive level of financial risk faced by shippers, to the detriment of the effective progress in competition.

Ofgas suggests that the creation of a screen based trading system should help flexibility and spot prices to converge, and will hopefully encourage greater participation and hence liquidity and depth in spot trading. However, shippers believe that this may not address their more immediate concerns. Improved access to capacity and greater competition in the provision of peak gas are seen as pre-requisites to the development of an efficient market, otherwise shippers may simply choose not to trade in the market at key times. Similarly, further reductions in barriers to within day trading are seen as pre-requisites the development of a trading mechanism.

Increased throughput through more efficient use of the system will improve returns to Transco and reduce costs for shippers and customers, and it is in the industry's best interests to pursue joint initiatives that achieve this. Currently, shippers and customers perceive that artificial levels of risk are raising costs of both gas and transportation. Unmanageable price volatility, which is not related to underlying supply-demand movements, is preventing the development of suitable risk management tools.

While some improvements, such as access to information, depend on more intractable issues and must be tackled over a period of time, others can be resolved more immediately. Any delay in addressing these will ultimately be to the industry's disadvantage.

We describe below the problems experienced by shippers under the current regime and how these contribute to underutilisation of the system. We also suggest a number of ways in which the regime could immediately be improved, and that contribute to the general longer-term vision expressed by Ofgas.

This document details an integrated set of proposals which we believe are necessary and sufficient to reduce artificial risks faced by shippers for 1998/99. The package has been designed to increase the availability of peak gas at lower prices, to encourage system-balancing behaviour, and to develop towards an effective on-the-day commodity market in gas. The proposals have been formulated by a small group of representative shippers, but discussed with a wider cross-section within the industry. The shippers involved in the detailed working are AGAS, Alliance Gas, Enron, Dynegy UK (ex NGC), and Shell Gas Direct.

¹ An on-the-day Commodity Market for the Gas Balancing Regime ; A Consultation Document, Ofgas, May 1998

Background

In the space of less than a year, marginal prices on the flexibility mechanism have ranged from -£14.60 to +£4.97 per therm. Comparisons with underlying price movements and responses by shippers to cashout signals suggest that these prices do not accurately reflect the prices that would have been set in truly competitive conditions. The events of 16 and 17 December 97 in particular generated high positive prices, highlighting a number of key concerns that were present throughout the winter but, because of the mildness of the winter, did not cause a prolonged series of artificially high prices.

On 16 and 17 December 1997, system demand was forecast at over 85% of the peak day, curtailing use of the Rough Space Only Service. At the same time, an offshore alert reduced supply availability at Easington, leaving the system short of gas. The events of these dates are taken as examples to analyse areas for improvement.

The mechanism for offering BG Storage services to the market left a significant amount of delivery capacity undersubscribed. The services offered by BG Storage prevented storage holders from accessing unutilised deliverability. In this way, shippers with gas in store were unable to bring gas onto the system in excess of their firm delivery capacity either under their own account, or to trade with another shipper, or to offer to the flexibility mechanism.

The mismatch of storage deliverability and NTS entry capacity booking might also have prevented economic access to stored gas. If a shipper had been able to obtain the rights to withdraw additional gas from storage, then the lack of access to NTS entry rights might still have either prevented gas from being made available. It is also likely that gas would only have been made available at an inflated price to take account of capacity overrun charges.

Capacity

Capacity booking rules also prevented additional beach gas from entering the system. Given the price of St Fergus entry capacity, shippers were unlikely to have booked additional annual capacity to bring in Excess Gas in the event of a supply failure at another terminal. The relative prices of entry capacity are such that swing at St Fergus is expensive relative to more southerly terminals. As a result, entry capacity bookings at St Fergus have been significantly lower than anticipated in the Transco Ten Year Statement, and gas flows have consequently been flatter, with swing taken at cheaper terminals. Capacity at St Fergus has therefore gone unutilised, despite the availability of offshore gas and the existence of spare capacity; the price of that capacity discourages access on a short term basis.

Some shippers have argued that the secondary capacity market is sufficiently liquid to ensure that all booked capacity can be accessed. This may be true to an extent. However, measures to increase liquidity could still be taken to improve access to capacity at all times. It is difficult to see why other parties would claim that the market was insufficiently liquid if it were not so. It may be that secondary capacity is

available but that the owner is seeking to extract some monopoly rent which buyers are unwilling to pay. Hence, capacity goes unused at entry points.

The misalignment between capacity overrun charges and flexibility overrun charges contributes further to high-priced flexibility action. Capacity overrun charges are higher than flexibility overrun charges. It is therefore more expensive for a shipper to enter gas into the system (above its capacity holding) into its own account or to sell at the NBP, than it is for that shipper to offer that gas to the flexibility mechanism. If our objective is to encourage shippers to seek to trade to settle imbalances rather than encourage recourse to Transco buying and selling gas on the system, then the reverse should be the case. Furthermore, unless the charges are equalised, a two-tier pricing system will develop in the on-the-day commodity market, depending on whether the counterparty is Transco or another shipper.

The size of the capacity overrun charge itself deters access to short term capacity. While any pricing level in the current regime should still be set to deter a flight from firm, we demonstrate below that these concerns are overstated, and that overrun charges can be reduced without causing significant shortfall on Transco's expected capacity revenues.

To the extent that amended storage services are introduced for 1998/9, some consideration must be given to the effect on commercial positions taken by shippers in the capacity market.

Flexibility Mechanism

A further effect of the current regime is the phenomenon of SMP chasing. Flexibility bids are allocated before a shipper's daily account and are allocated whole. Nevertheless, flexibility bids are subject to the same risk of physical failure as any other gas flow. To the extent that a flexibility bid is underactioned, a shipper may be pushed outside its imbalance tolerance and be exposed to the difference between the price of the accepted bid and the system marginal price. Given the volatility in system marginal prices, this exposure can at times be significant. This itself may deter gas from the flexibility mechanism. One way for a shipper to minimise this exposure is to ensure that its bid is as close as possible to the expected marginal price. Therefore shippers will not so much compete to be the cheapest System Buy bid on the system (or dearest System Sell), but may chase a higher and higher anticipated marginal price. The only price where there is certainty of no penalty for underdelivery is the system cap, at 99.9999 p/kWh.

As the rules do not encourage spare flexibility to be made available to the market at competitive prices, shippers are more inclined to hold flexibility in their own account as insurance against facility failure. In aggregate this can lead to flexibility being held which is vastly in excess of the amount required to balance the system, and leads to increased costs for all players. Although ultimately borne by customers, until the costs can be reflected in sales contracts, shippers incur them.

This can also lead to an artificially inflated demand for storage and other swing services such as the requirement to swing up and down on fields rather than trade out an imbalance position. Such increased ramping can also reduce field efficiencies.

These reasons help explain why the OTC market and the flexibility mechanism are not traded at key times and that occasionally the markets can dry up, with prices retreating to more extreme levels.

While the establishment of a screen-based system may help facilitate trading when the market is active, it is unlikely to create liquidity when the underlying rules discourage shipper participation. On its own, the creation of a system addresses none of the issues raised above. Indeed, it may exacerbate the existing problems. Parties with early warning of an alert could start a run on the market not only by removing their own bids, but triggering acceptance of any other competitively-priced bids. Unless the regime encourages other available gas to be bid onto the system, the market could dry up more quickly and even more extreme prices result. At least currently, the process is slowed as a party with early warning has to call round likely counterparties OTC to have the same effect, rather than accepting system bids instantaneously.

Market structures and trading mechanisms are normally developed in response to commercial pressures and evolve according to the needs of market participants. They are not created by regulatory *fiat*. In order to encourage the development of an on-the-day market, we therefore strongly recommend that other changes to address the issues above be introduced first.

We recognise also that efficiency in system balancing, and the ability for shippers to be held entirely responsible for achieving a system balance without Transco intervention, may not be a likely prospect for the short term. This course of action is not possible without significant improvements in access to on-the-day information against which shippers may react. Transco also needs this information in order to be able to schedule volumes in the transportation system efficiently. The resolution of these issues relates directly to the interface between offshore and onshore regimes, which is unlikely to be reached in time for winter 1998/99. While the industry works towards dealing with some of the longer-term issues, there are changes, which can be made immediately, which will improve the functioning of the market and reduce risks faced by shippers.

Shippers recognise that these improvements can only be made with Transco's support. In the short term, Transco is protected from downside through the formula and through cash neutrality. A reduction in interruption would have immediate benefit, but the greatest opportunity is the creation of additional demand because of increased efficiencies, lower costs and reduced risk.

Many of these issues can be addressed without significant change to the Network Code or to the UK-Link systems. They are grouped here in three topic areas:

- Peak gas availability
- On-the-day commodity market
- Cost targeting

Peak Gas Availability

As described above, peak gas is available but is prevented from being offered to the system, through the Network Code rules in two areas: through restricted storage services and through the capacity booking rules.

Storage

In 1997/98 peak gas was withheld from the market, out of storage in the following ways:

- The V factor prevented Space Only services being accessed on days when consumption was above 85% of the peak day level
- Top-up set high ceiling prices on the flexibility mechanism
- The fixed price regime under which Rough services were offered meant that only 44% of available deliverability was sold on an annual basis for 1997/98.
- Firm storage capacity holders (and BG Storage themselves in respect of uncommitted capacity) can withhold from the market unused deliverability.

The Network Code contains other terms that prevent economic access to storage:

- The charging mechanism makes late booking more expensive by applying the same annual charge for a reduced period.
- The lack of a liquid secondary market in capacity at the Easington entry terminal prevents the Rough Space Only service from being effectively utilised.
- The absence of penalties on BG Storage for failure to deliver leaves all balancing risk with shippers. Conversely, greater liquidity in the gas spot market allows this risk to be addressed through a choice of trading at the beach or at the NBP and through negotiable contract terms.

The V factor restriction was amended through Modification Proposal 0220, and Top-up is being addressed elsewhere.² Modification Proposal 0224 "Revision of Rough Services" was raised on 23 March 1998 to address the remaining issues over access to storage, but includes elements which are no longer valid.

A revised modification proposal is attached which addresses the outstanding points.

Capacity Utilisation

Access to capacity is restricted in a number of ways as described above.

NGC raised modification proposal 0230, which describes how a use-it-or-lose-it regime could be applied to entry points. To the extent that Transco can assess how much capacity is available but is not being utilised, this capacity can be made available to other shippers on an interruptible basis. The party who originally booked annual firm capacity would still have prior rights to that capacity if required later in the day, but would be unable to prevent other parties from accessing that capacity.

² Review of top-up gas : A Consultation Document, Ofgas, February 1998 and Review of top-up gas : Conclusions, Ofgas, April 1998

Transco would similarly be unable to restrict gas flow by preventing access to short term unbooked capacity.

It is considered that for the current capacity rationing model to be replaced, some definition of firm capacity rights needs to be introduced, replacing the concept of Transco selling unlimited capacity at entry points. This is a subject of debate and may not be achievable in time for winter 1998/99. However, we consider that the industry should move towards this principle and, in the meantime, modifications should be consistent with the subsequent introduction of improved capacity definition. Modification proposal 0230 is supported in this context.

NGC's modification reflects similar developments in US gas transmission services. When the FERC found that secondary markets in transportation were not workably competitive, two rights were made mandatory under Order 636 for directly regulated markets:

1. Capacity release which allows the resale of rights to transportation capacity.
2. Flexible receipt and delivery points which magnifies the competitive effects of capacity release by creating access to transportation alternatives which would not be available otherwise.³

The concept of flexible entry points may be applicable to the UK by transferring unused capacity rights at one entry point into an equivalent or lower priced entry point. This is being discussed separately under modification proposal 0127.

As these issues are already in the public domain, no additional modification proposal is suggested as part of this package.

Reduce Overrun Charges

One issue that is not specifically addressed by proposal 0230, and could be introduced separately and in addition to that proposal, is the reduction of overrun charges.

Using figures taken from Transco's Ten Year Statement and prices under the Bronze Book, 81% of Transco's capacity revenue is derived from two constrained terminals, St Fergus and Barrow. This proportion rises to 84% under the rebalanced indicative 75/25 proposal. Assuming that capacity at those terminals will be fully booked for winter 1998/99, any flight from firm will be restricted to a proportion of the remaining 19% (or 16%).

In order to determine the effect of a flight from firm, let 'M' represent the multiplier for capacity overrun charges. For higher M, a shipper would prefer to book capacity than pay a high multiple for overrun on relatively few occasions. For lower values of M, a shipper will be indifferent between booking lower levels of capacity and paying overrun charges on more frequent occurrences of breach. Using a normal winter load duration curve a shipper is indifferent between booking capacity and paying overrun

³ 'The Scope of Deregulation for Natural Gas Pipelines and the "Workable Competition" Standard', Dan Alger, from 'New Horizons in Natural Gas Deregulation', 1996

charges when the multiple is 8: when the multiple is 8, the amount of money saved by the shipper by not booking annual capacity is exactly matched by paying a penalty of 8 days capacity on every therm he puts through the system.

Other than a cashflow effect, Transco should also be indifferent between receiving revenue through annual capacity bookings and penalty charges on capacity overrun.

If a winter turns out to be milder than normal there would be fewer overruns and therefore less revenue corrected. The reverse would be true for a colder than average winter. The formula protects Transco from these differences.

A draft modification proposal is attached to reduce the value of the capacity overrun multiplier to 8 and to remove the capacity ratchet.

Align Flexibility and Capacity Overrun Charges.

A further anomaly in capacity charging is the differential between capacity overrun and flexibility overrun charges. A shipper can sell gas above booked capacity levels more cheaply to Transco than to other shippers or even delivering into its own account.

This also has implications for an on-the-day market. Unless the charges converge, a shipper would need to define separate prices for the same tranche of gas depending on whether it was taken as a flexibility bid or accepted by another shipper. This could be especially problematic if an on the day commodity market is developed as suggested by Transco.

A proposal is attached to align flexibility and capacity overrun charges.

Assuming new entry capacity services are developed for winter 98/99, some shippers argued that it is essential that parties are given the opportunity to review their holdings at the time of implementation. To avoid possible accusations of discriminatory behaviour, shippers could have the choice to unwind their bookings to take advantage of the new regime, which was not available when their bookings had originally been made.

On-the-day Commodity Market

Ofgas has stated that it considers an on-the-day market to be the most appropriate way to develop the balancing regime. The group of shippers was equivocal in its support for this move, with many shared concerns over the introduction of such a change, and its implementation.

Development of a bilateral market

In other competitive gas and electricity markets, it has been unusual for a regulator to determine that a market should be established. Insofar as the underlying rules encourage trade, then the volume of OTC trade will encourage market operators to develop products in response to this traffic. In the Nova gas transmission system in Alberta, Canada, two screen based trading systems were developed in addition to the OTC market to meet the demand for such services.

Moreover, the establishment of a market will not guarantee that industry players will participate. The existing rules of the Network Code have the effect of drying up the OTC market and the flexibility mechanism at key times, such as when the system is known to be short because of a supply failure. When this happens, shippers wait until Transco takes action to balance the system, setting the price against which an out-of-balance shipper must trade. There is no reason to suspect that a screen-based market will not behave in a similar way unless other rules are also changed.

It may even be the case that a screen-based system could exacerbate some of the current problems. Currently, a producer who has early warning of a production problem offshore can start to buy gas at other terminals through OTC trading. This could be effected on an accelerated basis through an automated system, which is a good thing. However, it also facilitates buying in excess of the producer's requirement to go long and create a greater system shortage while hoarding flexibility. He could then sell this excess flexibility back into the market at inflated prices. To avoid this, the lack of depth in the market must first be resolved: gas must be encouraged onto the market at peak times such that the level of activity required by a party to create such an effect on the market is unacceptably large.

Therefore, the introduction of modifications to allow greater competition in peak gas through capacity booking and storage is a pre-requisite for the establishment of a market.

The timetable for introduction of a screen-based system already seems optimistic for introduction in time for winter 1998/99. However, there are advantages in making some incremental development towards a trading mechanism over the winter insofar as it can be achieved at low cost.

For example, the flexibility screens already contain sufficient information for shippers to transact bilaterally if a third party can facilitate the trade. An independent operator could use this information in the meantime. A shipper wishing to accept a bid placed on the flexibility mechanism could contact the market operator. The market operator could in turn contact the shipper who had placed the bid, and confirm with both parties over the phone that the bid was enacted.

In order to address shippers' concerns over confidentiality, the market operator in this instance could be the one selected through the tender process to operate a centrally cleared system as suggested by Ofgas. There may be additional advantages to the

operator in developing an interim offering, which would allow them to gather market intelligence, which could shape the proposed screen-based system.

The introduction of such an interim product would clearly be at the discretion of the selected market operator. There would seem to be little point in mandating a halfway house without the involvement of an operator's view on what could be made available. No modification proposals have been raised here in that regard. However, the industry should be careful to ensure that any proposals that are implemented are consistent with, and do not interfere with, the possible introduction of bilateral trading arrangements in the short term.

Remove Current Restrictions on NBP Trading

In May 1997, Enron raised modification proposal 0149 to allow matched renominations at the NBP. This addressed a number of issues:

- Shippers had showed clear preference to trade at the NBP, but were prevented from resolving within-day imbalances in this way.
- A shipper wishing to buy or sell gas to meet a changing demand could only do so at the beach, which exposed that shipper to the uncertainties of the CVA process.
- Within-day trading at the NBP emerged, where shippers might renominate beach contracts but could not pass these nominations to Transco. Transco could therefore receive inconsistent information from shippers on AT-Link and via Terminal Operators.
- Shippers would incur scheduling charges, which would be built into the price of the trade, sustaining artificially high prices.
- In order to minimise scheduling charges, shippers could renominate to push inaccuracies onto the output side through renominations of DM offtakes. This would lead to greater inaccuracies of NDM forecasts.

An adjusted version of this proposal was subsequently introduced under modification 0169 (The Gas Balancing Regime – Short Term Proposals). This permitted within-day trading at the NBP accompanied by input and offtake renominations under certain conditions:

- trading 'chains' could only be two shippers in length ;
- the matched renominations principle must be preserved across those two shippers ;
- trades were limited to 6 per shipper.

Transco expressed concern that without these additional restrictions, shippers would be able to change their balance within day. Shippers might thereby create the need for additional balancing actions that might increase costs on the system.

Since the introduction of modification 0169, the conditional trades have been used to a limited extent. However, shippers have still expressed a preference to simplify trading at the NBP. This is reinforced by the prevalence of entry assisted within day trades still being reported in the daily gas journals.

If a shipper chooses to transact within day at the NBP, then the shipper faces restrictions on how the quantity may be nominated or must incur scheduling charges.

The limitation on the number of trades and types of trades ensures that these trades are only of use in restricted circumstances. Although on the one hand, forward trading takes place almost exclusively at the NBP, showing shippers' confirmed preference for this as the location of trade, the reverse is true for within-day trading. The restrictions serve to reduce liquidity in the on-the-day NBP traded market.

These restrictions could easily be wiped away by removing the requirement to match renominations. Transco would receive more accurate AT-Link nominations both on the input side (to improve information on gas flows into the system) and on the output side (to improve the accuracy of NDM nominations). Several arguments have been raised against this.

- It has been argued that legitimising over- and under-delivery will increase its incidence. Yet shippers are understood to be already responding to commercial signals. Shippers already over-and under-deliver into the system in response to the differential between cashout and spot prices. This has been reported to happen in any case and is not prevented by the matched renominations principle. The risk of extreme prices combined with uncertainty over information raises a legitimate concern over how a shipper should manage the risk of extreme imbalance penalties. If the system is short and a shipper believes that he may subsequently be allocated less than nomination at a terminal, then that shipper may legitimately seek to protect against that risk by erring on the side of caution and over-delivering into the system. The true allocation may not be known until M+15 so the shipper cannot know during the day whether his account will be held whole. The effect of this principle is that a shipper choosing to over- or under-deliver to manage this risk is unable to indicate this to Transco.
- A significant player could legitimately begin to create long or short positions in the system within day to create destabilising situations that may result in increased balancing actions. Those parties (particularly those with excess flexibility) would then be well placed to take advantage of resultant flexibility actions. This would be a clear breach of standard condition 2 of the Shippers' Licence. It would become obvious if a shipper sought to manipulate the system balance in order to take advantage of flexibility action. Moreover, a shipper could only benefit to the extent that their own flexibility bids were taken, and the margin on the bids taken was sufficient to counter the resultant balancing neutrality costs. In practice, this is nearly impossible to sustain.
- Shippers would have no incentive to provide prompt information and may wait until 03.59 in the gas day before entering accurate information for that gas day. This is possible under the current regime, yet shippers still make reasonable nominations ahead of the day. Any fine-tuning late in the gas day is to optimise scheduling penalties and to the extent that input flows are made more accurate, the matched renominations principle merely pushes inaccuracy onto the output side.

This principle goes to the heart of the gas balancing regime. Hitherto, the only way foreseen in the Network Code that a shipper can alter its own imbalance within day to help achieve a system balance is through an accepted bid on the flexibility mechanism. If the future regime is to reduce the amount of Transco intervention

required and replace it with greater freedom for shippers to achieve a system balance, then this principle must be revisited.

The lack of within-day information on gas allocations means that a shipper may not become aware of an imbalance on its account until M+15. A shipper is therefore not always able to trade out known balances within day. The matched renominations principle is based on an invalid assumption: that a shipper can find out about an imbalance within day and be able to take action to return to balance by the end of the gas day. At the same time, the shipper is prevented from advising Transco of any preventative action it may have taken to hedge against an expected (but unknown) short position when a punitive System Marginal Buy price has been set.

In essence, a transaction on the flexibility mechanism automatically allows for an unmatched renomination. A trade between shippers does not. The current mechanism therefore does not allow shippers to correct an imbalance that cannot be directly attributed. The only means of doing so rests with Transco. This prevents progress in the development of efficient balancing tools between shippers.

As Transco continues to have concerns over removal of the matched renominations principle, we suggest a compromise proposal to allow some relaxation of the existing restrictions without a move towards unfettered position taking. An NBP trade could be permitted with the option of making a matching renomination at an entry or exit point. In this way, shippers would be allowed to alter their within-day balance, but only to the extent of a within-day trade at the NBP, which would still be subject to approval by Transco.

In this way, a shipper could legitimately bring additional gas onto the system at a time of shortage, without requiring flexibility action. The fact that two shippers are involved would cut down the opportunity for an individual shipper to game the system. Most importantly, Transco retains primary access to trading and renominations information to assess whether trades are being done to destabilise the system balance. Transco is therefore in prime position to report cases of suspected abuse and seek to reintroduce restrictions at the earliest opportunity if necessary.

It is to be expected that the establishment of a separate market operator in due course and the separate regulation under the Financial Services Act will reduce the opportunity for such examples of market abuse.

While all shippers agreed with the objectives of this proposal, namely to stimulate liquidity in the within-day NBP market without encouraging shipper behaviour that leads to increased flexibility action, it should be noted that one shipper had reservations over the sufficiency of controls. In particular, they felt that greater means to restrict and control shipper behaviour would be required in order to prevent "balancing anarchy".

A draft modification is attached to reduce the current restrictions on NBP trading, within this framework..

Removal of extreme SMP risk

A significant issue faced by shippers is the exposure to SMP, particularly where the SMP was set by a very small quantity of gas at a price very distant from the next highest accepted bid. This is acutely felt when the price is markedly different to other bids accepted within the same flexibility tranche, and when the quantity accepted is not measurable in terms of the system-balancing requirement.

However, the replacement of an SMP penalty with an alternative that may be lower than the bid price may discourage the action of an accepted bid. As payment for the bid exceeds the penalty for underaction, the shipper is inadequately incentivised to perform. Conversely, a penalty which is greater than the bid price can deter gas from being bid onto the flexibility mechanism as the shipper takes undue risk for the gas not being allocated.

In any case, Transco has the discretion to avoid such price setting through its ability to accept bids within a tolerance of +/- 0.25 mcm.⁴

Shippers favoured the principle of differentiated pricing (i.e. higher penalties for greater imbalances). Thus, there was a preference in the short term to retain commercial incentives to balance via the traded market rather than rely on cashout. This could clearly be revisited if, for example, commercial incentives were replaced by a physical balancing requirement.

Consequently, no draft proposals are raised in this area.

Cost Targeting

Remove Constraints Costs from Balancing Neutrality

A final area of artificial costs imposed by shippers is through the resolution of constraints at entry terminals by accepting locational bids on the flexibility mechanism. When a constraint currently arises, there are a number of actions that Transco can take:

- Ensure adequate capacity exists through expansions in pipelay or compression
- Transco can restrict firm entry rights to what is physically available
- Transco can restrict input through flow control
- Transco can request shippers at the input point to turn down flow
- Transco can accept system sell bids at the appropriate location on the flexibility mechanism.

Clearly the first option requires appropriate notice and cannot be called upon in the short term, except to the extent to which compression is not being fully utilised. The second option is currently being investigated and some incremental progress towards this has been described above. Presently, Transco makes requests under the fourth

⁴ Operational Guidelines, Part D, Section 1 ; introduced in August 1996

option above, but this is rarely successful. Normally, Transco resolves such constraints by taking location-specific bids on the flexibility mechanism.

As long as the costs of constraints can be spread across all shippers this way, the charge to each individual shipper can be presented as relatively small. This obscures the cost to Transco of relieving the constraint. Where there is ineffective competition in flexibility at an entry point, it could allow a shipper flowing gas at that point to take advantage of the ability to place locational bids there, which leaves the costs of dealing with the constraint as insufficiently targeted. Ofgas is understood to be investigating the potential for shippers to take advantage of such situations.

The combined effects of the existing rules are such that Transco is protected from the effects of overselling capacity, at the expense of the general community.

Only Transco can develop the necessary services and cost structures to address problems caused by these constraints. Only Transco has the option to assess the extent to which action is required or can choose to back gas off the system (when they would need to provide a level of refund on entry capacity that could not be met).

It would therefore seem reasonable to separate system balancing costs from the costs of constraints. This could be achieved by Transco declaring what system sell action is required to address the constraint, and taking an equal and opposite action at unconstrained terminals to maintain the pre-existing balance. Subsequent balancing action would need to be accounted for separately.

The costs, having been divided into their component parts, can then be appropriately targeted. The costs of balancing would then be targeted to out-of-balance shippers with any remaining charge recovered through balancing neutrality. However, the costs of dealing with the constraint would be borne by Transco. Transco is therefore incentivised to operate the system in such a way as to minimise transportation constraints, rather than be protected from any suboptimal operation.

Conclusions

A number of short term modifications are proposed here to improve the current operation of the gas balancing regime. At their heart, they address access to capacity and stored gas to create additional availability and competition in the provision of peak gas. By encouraging gas to market in this way, the likelihood of artificial price spikes will be reduced.

The paper is more equivocal over the introduction of an on-the-day commodity market but recognises how an interim development could be encouraged in the short term. However, we do not see how such an interim development can be mandated under the Network Code Modification Process. We therefore support the removal of remaining barriers to on-the-day trading at the NBP to facilitate the natural development of the on-the-day market.

The proposals above have been considered achievable for introduction prior to winter 1998 and we are willing to discuss in further detail as necessary to derive suitable systems specifications to accelerate development and implementation. It has been commented that the Network Code has successfully delivered competition in shipping and supply to industrial, commercial and domestic markets. The next stage must establish a new platform on which significant increases in efficiency and utilisation can be built. These proposals should be seen as a first step to achieving these aims.

Appendices

Modification Proposals

- Special Storage Deliverability Services
- Revision of Rough Services
- Reduce Overrun Charges
- Alignment of Capacity and Flexibility Overrun Charges
- Remove Constraints from On-the-day Trading
- Remove Constraints Costs from Balancing Neutrality